DOCUMENT RESUME

ED 358 171 TM 019 979

AUTHOR Petrosko, Joseph M.
TITLE The Plan for Assessing the Impact of the Kentucky Education Reform Act (KERA).
PUB DATE Apr 93
NOTE 42p.; Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Accountability; Educational Change; *Educational Legislation; Elementary Secondary Education; Evaluation Methods; Program Evaluation; Program Implementation; *Research Methodology; *State Legislation; State Programs; Statewide Planning
IDENTIFIERS Kentucky; *Kentucky Education Reform Act 1990; Performance Based Evaluation; *Policy Implications; Reform Efforts

ABSTRACT

An analysis was made of the methods being used to assess the Kentucky Education Reform Act (KERA) of 1990. Although no single assessment plan has been developed, various activities are aimed at studying both the implementation and the impact of the law. Four assessment efforts are described as conducted by the following groups: (1) the Office of Education Accountability; (2) bureaus of the Kentucky State Department of Education; (3) the school accountability system; and (4) the KERA evaluation governing board. All of these agencies have produced, or will be producing, important information about statewide educational reform. However, many questions about the KERA still remain to be investigated. The school accountability system is especially worthy of intensive study because of its unique features. The most recent accountability initiative is the KERA Evaluation Governing Board, 10 citizens charged with developing and implementing an evaluation of the KERA. Kentucky is making very extensive use of student performance assessment, rather than using standardized multiple-choice tests. Furthermore, results of performance assessment will weigh heavily on which schools get financial rewards and which schools receive sanctions.
(Author/SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED358171

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
JOSEPH M. PETROSKO
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Plan for Assessing the Impact of the Kentucky Education Reform Act (KERA)

Joseph M. Petrosko

School of Education

University of Louisiville

Paper presented at the annual meeting of the

American Educational Research Association, Atlanta, April 1993.

TM018171

Abstract

An analysis was made of the methods being used to assess the Kentucky Education Reform Act (KERA) of 1990. Although no single assessment plan has been developed, a variety of activities are aimed at studying both the implementation and the impact of the law. Four assessment efforts were discussed at some length: a) the Office of Education Accountability, b) bureaus of the state department of education, c) the school accountability system, and d) the KERA evaluation governing board. All of these agencies have produced, or will be producing, important information about statewide educational reform. However, many questions about KERA remain to be investigated. The school accountability system is especially worthy of intensive study because of its unique features. Kentucky is making very extensive use of student performance assessment, rather than using standardized multiple-choice tests. Furthermore, results of performance assessment will weigh heavily on which schools get financial rewards and which schools receive sanctions.

The author was very tempted to limit this paper to the following single sentence: **There is no plan for assessing the impact of the Kentucky Education Reform Act (KERA).** The preceding was a very tempting statement because there is some element of truth to it. However, it also has some substantial inaccuracy. KERA does have a plan for its assessment, if the word "plan" is liberally interpreted and fully understood. Thus, I will not deliver a one-sentence paper and then go home! I aim in this paper to describe KERA and the current and future efforts to assess it. In the course of the discussion, I will explore the issues that have emerged in evaluating one state's educational reform effort, issues that are by no means unique, because they face educators in other states.

I will place the experience of Kentucky in a national context by analyzing the state's attempts to assess educational reform. Many states have instituted educational reform efforts in recent years. In conjunction with these efforts, different approaches have been developed to monitor the implementation and effectiveness of reforms. What approaches have been used or will be used by Kentucky?

Origins of KERA

In order to discuss the assessment of KERA, it is useful to briefly review the history and provisions of the law. The Kentucky Education Reform Act (KERA) of 1990 was the culmination of one of the most far-reaching state educational reform efforts in recent American history. The law was passed because the Kentucky Supreme Court declared in June 1989 that the entire state school system was unconstitutional. In judging a suit brought by a consortium of 66 low-income school districts, the court found that the state legislature had failed its responsibility to operate a statewide school system with

sufficient funding to assure equal educational opportunities to all children (Miller, Noland, & Schaaf, 1991).

In arriving at its decision, the Kentucky Supreme Court used both social science data (e.g., drop-out rates, test scores) and financial data (Petrosko, 1990). The social science data revealed that Kentucky compared poorly with the other 49 states and the states in the immediate region. The financial data revealed a system of taxation that was, on the average, low in level of support for schools, and quite variable from district-to-district.

Section 183 of the Kentucky state constitution states: "The General Assembly shall, by appropriate legislation, provide for an efficient system of common schools throughout the state" (Rose vs. Council for Better Education, Inc., 1990, p. 205). Using a variety of data presented to it as evidence, the court found that Kentucky had an "inefficient" system of schooling--so much so as to be unconstitutional.

The effect of the court decision was dramatic. In one stroke, all state statutes creating, implementing, and financing elementary and secondary education were invalidated. Thus, the legal basis for the state department of education, all local school boards, and laws on teacher certification, disappeared.

The drastic nature of the Court's decision meant that the state legislature was forced to reform education. But determining the nature of the reform was very much open to interpretation. Since uneven funding was the basis of the lawsuit, state legislators could have restricted their activity to simply reforming school finance laws. They did not do this. Instead, a comprehensive law was passed with many educational changes, so many as to constitute a comprehensive overhaul of the entire state system of public

education. The necessity for reform of school funding became the opportunity to make a number of far-reaching reforms, in finance and in two other areas of education: governance and curriculum.

In an earlier paper (Petrosko, 1990), I offered a few speculations about why reform took the course that it did in Kentucky. Briefly, I argued that a favorable conjunction of circumstances helped propel the reform effort. These included having: a) a governor with strong views about what kinds of changes should be made, b) a number of prominent citizens (from the media, business, academia) who had for years been lamenting the condition of education in the state and were eager to champion comprehensive reform efforts, and c) a state legislature with key members interested in systemic reform rather than piecemeal changes. In addition, reform occurred against the background of fears about the long-term economy in a state heavily dependent for revenues on two commodities with uncertain futures--tobacco and high-sulphur coal. Undoubtedly, many other factors also contributed to the education reform effort; a truly comprehensive historical analysis of KERA remains to be written.

The changes mandated by the law, whether in school governance, in curriculum, or in finance, all had the same underlying purpose. The goal of all of these changes was to "assist students in acquiring basic skills, communication skills, understanding of governmental processes, knowledge to make economic, social and political choices, and other skills necessary to compete favorable with students in other states" (Miller, et al., 1991, p. 8). This statement of purpose and other statements of the rationale for KERA all point in the direction of the necessity to raise levels of student achievement. Achievement does not apply only to the basic skills; it also means problem-

BEST COPY AVAILABLE

solving and higher-order thinking. In the introduction to the law, the state legislature specified that schools must develop their students' abilities to "think and solve problems in school situations and in life; [and] connect and integrate experiences and new knowledge with what they have previously learned and build on past learning experiences to acquire new information through various sources" (Miller, et al., 1991, p. 28). This language came from a report issued by a study group of Kentucky citizens. The group had been charged by the governor to determine what Kentucky students will need to know to function successfully in the twenty-first century (Council on School Performance Standards, 1989).

Provisions of KERA

In order to effect improvement in student academic performance, an array of changes were prescribed. The scope and dimensions of these changes make the law difficult to succinctly summarize. KERA is not a unitary reform law with one or two prominent elements; it is, rather, a package of educational changes under a single title.

To better grasp KERA as a whole, it is worth trying to look for some general characteristics of the law. Are there things that tie various provisions of the law together? I think several major themes are evident in KERA; I have identified four.

One theme is the prime importance placed on high levels of <u>student achievement</u> and other student outcomes indicative of successful schooling. As was stated earlier, problem-solving and higher-order skills are given special prominence. The importance of higher-level types of achievement can be seen in several aspects of KERA: the stated curricular goals of the law, the curriculum framework developed for local districts, and the fact that the

student assessment system includes testing procedures that aim at measuring more than basic skills.

A second theme is that the individual school is viewed as the most significant social unit for educational change. School based decision-making will be implemented in every district of the state. This means that a school council consisting of parents, teachers and the principal will have important powers regarding curriculum and school personnel. Futhermore, a new statewide student assessment system, using largely performance assessment, will have the school as the unit of analysis. Rather than emphasizing test scores of individual students, average scores in an entire school will be calculated and used in determining whether teachers and administrators in the school receive financial rewards or receive sanctions.

A third theme is the attempt to increase professionalism and decrease cronyism. This is evident in several provisions. The Commissioner of Education, a gubernatorial appointee, is now the chief state school officer rather than the Superintendent of Public Instruction, an elective office that had been rife with political deal-making. A citizen's State Board for Elementary and Secondary Education governs education with the Commissioner. KERA has provisions against nepotism in hiring school employees and against other forms of financial favoritism.

A final, and very discernable theme, is financial equity. This is not surprising, given that the law was passed because of a court suit brought by low income school districts. School finance changes are being put into place that will help equalize the expenditures per pupil of school districts throughout the state and to raise expenditures of all districts.

The provisions of the law were are organized into the categories curriculum,

governance, and finance. Some of the more significant of the law's requirements in each of these areas are summarized below. Following the summaries, Tables 1, 2, and 3 provide more detailed lists of all of KERA's major provisions.

Curriculum

-- School-based decision-making was emphasized by the requirement that school councils be established in every school: councils involving parents, teachers, and the school principal. The councils have power to make policy for the school in such key areas as instructional materials, personnel, and curriculum.

-- Ungraded primary school was established. Elementary schools will combine grades 1 through 3. Students will enter grade 4 only after successful completion of the primary school program.

-- Student testing will evolve to a system dominated by performance assessment. There will be a reduction in the use of multiple-choice tests. Results of student performance assessment will contribute to a formula that determines educational rewards and sanctions for each school.

-- Economic rewards (e.g., cash bonuses for teachers) will be given in those schools that increase their percentage of successful students. Sanctions will be leveled against schools with decreasing numbers of successful students.

Governance

--- A 12 member State Board for Secondary and Elementary Education was established. The 11 voting members are appointed by the governor, with the twelfth, non-voting member being the executive director of the Council on Higher Education. Board members are private citizens who, during their four-year terms, cannot be employed as professional educators. Appointment is without regard to political affiliation. The Board develops and adopts the

regulations that govern the state's 176 school districts and the state department of education.

-- The office of Commissioner of Education, an appointed constitutional position, was established. The commissioner is the chief executive officer of both the State Board and the state department of education. The commissioner recommends and implements the policies of the State Board and directs the management of the state department of education.

-- The Office of Education Accountability (OEA) was established under the Legislative Research Commission as an independent arm of the state legislature. The purpose of the Office is to: monitor implementation of KERA, review the state's system of school finance, verify the accuracy of school and state performance and investigate unresolved allegations of wrongdoing at the state, regional, or district level.

Finance

-- The Support Education Excellence in Kentucky (SEEK) fund was established, which guarantees the amounts of money spent per pupil throughout the state ($2,420.00 per pupil in 1991-92).

-- A minimal level of local financial support will be required (30 cents per $100 assessed valuation). Furthermore, by July 1, 1994 all property will be assessed at 100% of fair cash value.

Table 1

Major **Curricular** Provisions of the 1990 Kentucky Education Reform Act (KERA)

Goals of education stress higher-level thinking as well as basic skills, self-sufficiency, effective citizenship, and successful transition to adult life.

A **model curriculum framework** will be developed by the state and disseminated to local districts.

Performance assessment will be implemented, including the use of writing exams and portfolios. Also, the following will happen.

Monetary rewards will be given to schools that increase their percentage of "successful" students. Success will be determined by performance assessment results and non-cognitive factors (e.g. drop-out rates and attendance).

Sanctions will be leveled against schools in which the percentage of successful students decreases. Measures could include removal of principals and teachers.

Professional development opportunities for teachers will be increased.

School-based decision making will be implemented. School councils consisting of parents, teachers, and the principal, will decide on curricular, personnel, instructional, and other matters.

Pre-school programs for at-risk 4-year olds (and as many other 4-year olds as possible) will be initiated.

Family Resource/Youth Service Centers will be established in schools within areas in which 20 percent or more of students qualify for free school meals.

Technology in education will be emphasized to a greater extent.

A **primary school program** will replace elementary school grades 1 to 3.

Kindergarten, minimum of half-day, five days a week, will be mandatory.

Extended school services, by means of extended days, weeks, or school years, must be provided to help all students meet learning outcomes.

Age of compulsory attendance may be raised to 18 (upon recommendation of the Commissioner of Education).

Table 2

Major Governance Provisions of the 1990 Kentucky Education Reform Act (KERA)

A 12-person **State Board for Elementary and Secondary Education** is established which will adopt policies for the department of education.

A **Commissioner of Education** will be the chief executive officer of the State Board and the state department of education.

The **State Department of Education** will:

- assist districts with curriculum design, school administration, and finance,
- monitor the management of school districts,
- engage in research and planning,
- operate regional service centers with a primary focus on professional development of school district employees,
- establish an assessment center for school principals,
- establish a training program and assessment center for school district superintendents.

An **Education Professional Standards Board** is created to establish requirements for teacher certification, evaluate preparation programs, and issue teaching certificates.

Members of **local boards of education** must:

- have at least a high school diploma or GED certificate,
- not have relatives employed by the school district,
- be limited to receiving campaign contributions of $100.00 from an individual and $200.00 from a Political Action Committee (PAC).

Local school **superintendents:**

- are responsible for all personnel act ons in the district,
- can be terminated by a local board on y with approval of the Commissioner of of education,
- cannot hire relatives or board mem:rs' relatives to work for the local district.

School **employees must:**

- not work for a school principal who is a relative,
- have a GED or high school diploma (classified employees),
- have the right of appealing a dismissal to a three-member tribunal appointed by the State Commissioner.

The **Office of Education Accountability (OEA)** is established as an independent arm of the legislature. OEA is to monitor the education system and the implementation of KERA.

Table 3

Major **Finance** Provisions of the 1990 Kentucky Education Reform Act (KERA)

The **Support Education Excellence in Kentucky (SEEK)** state support fund is established to ensure, among other things:

a guaranteed amount of money is spent per pupil,

curriculum and governance provisions of KERA are funded (e.g., educating at-risk children, funding professional development for teachers).

Minimal levels of **local support** are mandated:

local tax rates will be 30 cents per $100 on property;

utilities, including cable television, may be taxed.

All real property is to be assessed at **100 percent of its cash value** by July 1, 1994.

No teacher will be paid below the **minimum statewide salary schedule** adopted in the state budget.

For schools that do not have school-based decision making, **maximum class sizes** (in terms of numbers of pupils per class) are:

Primary grades: 24

Grade 4: 28

Grades 5 and 6: 29

Grades 7 through 12: 31

For middle and secondary schools that do not have school-based decision making, the **maximum teaching load** will be 150 pupil hours per day.

The State Board of Elementary and Secondary Education will establish a program to **assist teachers in obtaining computers** for their personal use. The program will include training provided by the vendor.

Kentucky Accountability Mechanisms for KERA

At the outset of this paper I stated that one can plausibly argue there is no plan for assessing the impact of the Kentucky reform law. In the strict sense of the word "plan" this is true. There is no written document that presents a detailed set of goals, objectives and procedures to comprehensively assess KERA. However, it is also true that a variety of current and future activities are aimed at assessing both the implementation of the law and its impact. By drawing upon the sum total of these activities, policy makers, now, and in the future, can avail themselves of extensive data about the effects of the law.

The source of these data are mechanisms (i.e., offices, positions, agencies, procedures) that are either: a) mandated by the law itself, b) natural outgrowths of past procedures, or c) results of future organizations that are now being formed. Four of these mechanisms are discussed below.

Office of Educational Accountability (OEA)

As mandated by the governance section of KERA, the Office of Educational Accountability (OEA) was established. OEA is under the Legislative Research Commission, a service agency of the Kentucky state legislature. OEA is defined as "an independent arm of the legislature" (Miller, et al., 1991, p. 16). The Office of Educational Accountability is charged with these tasks: monitoring the implementation of KERA, reviewing the state's system of school finance, verifying the accuracy of school district and state performance, investigating unresolved allegations of wrongdoing at the state, regional, or district level and reporting to the Legislative Research Commission (Miller, et al., 1991).

OEA is considered the "watchdog" agency of school reform. The office places a relatively high priority on enforcing certain governance provisions of the

BEST COPY AVAILABLE

law. Specifically, KERA prohibits nepotism in hiring school employees and forms of financial favoritism. OEO operates a toll-free telephone line that can be used to report allegations of such wrongdoing. In addition, the office employs several persons who investigate those allegations that are reported.

The Education Accountability office engages in other forms of monitoring. For example, when personnel in the state department of education write regulations to implement a provision of KERA, OEA might be consulted to render a judgment on whether the regulations are consistent with the intent of the law.

Department of Education Bureaus

After KERA was passed, the Kentucky Department of Education was reorganized. New offices were established and new personnel were hired. Important changes were made, but continuity was maintained also; it is the nature of every state department of education to engage in systematic oversight of statewide programs. In what might be called a natural outgrowth of past procedures, the bureaus of the current state department of education perform activities that involve monitoring the school reform law. This is not really different than what the pre-1990 department of education did, or what any state department of education does. Only the content of the monitoring differs.

The current Kentucky Department of Education has three bureaus: Learning Support Services, Learning Results Services, and Management Support Services. In addition, several offices and divisions (e.g., fiscal and strategic planning, legal services) report to deputy commissioners. All of these bureaus and offices strive to meet yearly objectives, and many of the latter are directly relevant to the education reform law.

Below is an example of a yearly objective and a report on its status. The

example is from an August 1992 report of the Learning Support Bureau of the Department of Education.

Annual Objective	Degree of Accomplishment
A. By June 30, 1992, 350 schools will have successfully implemented school-based decision making indicated by student performance and participant surveys obtained during the 1991-92 school year.	Partially completed: As of June 8, 1992 approximately 481 schools in Kentucky have implemented School-Based Decision Making. Surveys are being completed at this time to gauge success levels of councils.

(Kentucky Department of Education, 1992, p. 10)

The kind of monitoring and assessment performed by the department often involves obtaining data to determine whether schools, school districts, and the department itself has complied with directives related to the law. The example cited above is a case in point. Other examples could be cited. For example, the Department requires local districts to file plans to carry out certain state-mandated objectives. For the most part, department monitoring might be called "bureaucratic oversight." I am using bureaucratic in a literal rather than pejorative sense.

School Accountability System

In terms of an organizational chart, this accountability mechanism could have been classified with the category just discussed, the state department of education. School accountability falls under the domain of the Learning Results Services Bureau of the department, and has its own associate commissioner. I made this a separate category because school accountability has a large profile, a large budget, and has many important implications for assessing KERA as a whole. The degree of importance placed on this part of the

reform law is revealed in the following quote, which comes from a citizen's guidebook to KERA published by the Legislative Research Commission, an agency of the state legislature.

> How will we know if education reform is working?
>
> Beginning in the 1991-92 school year, students will be tested in reading, math, writing, science, and social studies in grades four, eight and twelve. These test scores will provide the base for determining school success when the State Board for Elementary and Secondary Education begins, in the 1993-94 school year, to assess schools to determine whether students are meeting goals . . . Also, local boards of education will be required to publish annually in the newspaper a report on the performance of students in each district. (Miller, et al., 1991, p. 29)

I have previously discussed the overall configuration of the Kentucky school accountability system (Petrosko, 1991). I will give only a brief description of the system here, stressing mostly the features of the system that make it unusual. The school accountability system (recently named KIRIS, Kentucky Instructional Results Information System) uses measurements of both cognitive and non-cognitive variables.

Performance assessment of students is an important feature of school accountability. "Performance assessment" is one of several phrases have been used in recent years along with "direct assessment," "authentic assessment," and "alternative assessment." As Worthen (1993) noted, "the several types of assessment all exhibit two central features: first, all are viewed as alternatives to traditional multiple-choice, standardized achievement tests; second, all refer to direct examination of student performance on significant tasks that are relevant to life outside school" (p. 445).

Prior to 1990, Kentucky used standardized multiple-choice tests for statewide assessment. In the 1980's, the Comprehensive Tests of Basic Skills (CTBS) was used for several years. After that, a Kentucky adaptation of the CTBS was used. The passage of KERA in 1990 signaled a radical break with the use of such instruments.

In accordance with KERA, a number of non-traditional measurements have begun being collected for the school accountability system. Students in grades 4, 8, 12 and other grades were tested in a variety of ways in the 1991-1992 school year. In testing called "transitional," students received multiple-choice and open-ended tests, and responded to a writing prompt. Tests had some common items and some matrix-sampled items. The open-ended items allowed students to construct responses to questions in their own words. Such items were scored by trained graders, and were consistent with the philosophy of performance assessment.

Students were also tested with "performance events." These involved having testers come to schools and examine students, who worked in small groups, with open-ended questions, problems, or tasks (in mathematics, science, and social studies). Finally, writing portfolios were collected from students.

On each type of cognitive measurement, student performance was judged to be in one of four categories: a) novice, b) apprentice, c) proficient, d) distinguished. These designations were applied by comparing the student's performance to a scoring rubric. Each rubric had a description of the kinds of responses that would merit a given designation. For example, a student who correctly answered a mathematics problem by correctly listing all steps for a solution might be given a proficient, but another student who missed steps or who made minor errors in steps would be rated apprentice. Levels of

performance were based on the opinions of subject matter experts and teachers. There was not a norm sample established, as would be for a traditional standardized test.

In addition to the cognitive measures described above, non-cognitive variables were measured at all schools. These were: a) attendance rate, b) retention rate, c) dropout rate, and (at high schools) d) transition rate. Retention means percentage of students held back a year (a low percentage is better than a high percentage). Transition rate means successful transition to adult life--the percentage of twelfth graders who go on to a job, the military, or further education rather than "graduating" to the unemployment rolls.

Using results from both the cognitive and non-cognitive measures, and going through a series of arithmetic calculations, each school was assigned an accountability index. Figure 1 shows what the source data would look like in calculating the index from a hypothetical high school. All of the numbers shown would be weighted in various ways and subjected to additional calculations--eventually leading to one number, an accountability index. For the data in Figure 1, the index is 39.5.

Noncognitive Data

Attendance Rate	93.06%
Retention Rate	6.07%
Dropout Rate	7.52%
Transition Rate	85.11%

Percentage of Students at Each Performance Level

Type	Level	Reading	Math	Science	Soc. Stud.	Writing
Common Open-ended	Novice	42.02	56.28	33.18	46.51	
	Apprentice	51.63	37.20	63.98	44.91	
	Proficient	5.60	6.06	2.35	8.56	
	Distinguished	0.75	0.46	0.49	0.02	
Matrix-sampled Open-ended	Novice	43.77	49.89	31.06	42.62	
	Apprentice	49.69	40.00	65.73	46.71	
	Proficient	5.30	8.00	2.15	8.67	
	Distinguished	1.24	2.11	1.06	2.00	
Performance Events	Novice		50.49	39.70	49.81	
	Apprentice		39.51	45.77	44.49	
	Proficient		7.94	10.05	4.10	
	Distinguished		2.06	4.48	1.60	
Writing Portfolio	Novice					33.96
	Apprentice					50.14
	Proficient					11.99
	Distinguished					3.91

Figure 1. Data from a high school that would be used to calculate the school's accountability index. (Source: Advanced Systems in Measurement and Evaluation, Inc., 1993b)

BEST COPY AVAILABLE

What happens to the accountability index? It is used in the final step of the process: computing a threshold, that is, a target for future performance. The process assumes that the theoretical ideal accountability index for a school is 100. In the hypothetical data presented above the index of 39.5 is 60.5 different than the ideal (100 - 39.5 = 60.5). To set the threshold for the school, 10% of the discrepancy number is calculated. So 10% of 60.5 is approximately 6.1 accountability points. This is added to the school's accountability index, 6.1 + 39.5, and the result, 45.6, is the threshold value, which is a target for performance when the school is measured and tested over the next two years. In other words, when cognitive and non-cognitive measures are calculated over the next two years, the school will need to have a 45.6 accountability index to meet its threshold value.

Schools that improve Schools that are one or more points above threshold will have financial rewards, and school staff members will decide how those funds will be spent.

Schools that stay the same If a school does not meet its threshold, but does not decline below its baseline accountability index, the school will be required to develop a school improvement plan and will be eligible to apply for money to implement the plan.

Schools that decline somewhat Schools that decline less than five points below the baseline accountability index will be required to develop an improvement plan (for which it is eligible to receive funds). In addition, the school will get one or more Distinguished Educators to help school personnel. These educators, who are specially trained practitioners, will help school personnel write and implement the plan.

Schools that decline markedly A school more than five percent below baseline accountability will be declared "in crisis." People in the school will have to write a plan and will be helped by a distinguished educator (see the section above). In addition, the distinguished educator will have the power to retain, dismiss, and transfer school personnel. Also, students may be allowed to transfer out of the school into a "successful" school, even it the latter is in another school district.

In summary, the school accountability component of Kentucky Education Reform Act has several distinctive features. Performance testing is emphasized rather than multiple-choice testing. Student performance is described with the terms novice, apprentice, proficient, and distinguished rather than with standard scores like percentile ranks. For accountability, each school is a unit that will be compared against itself--with the school's performance in 1991-1992 used to set performance targets for 1993-1994. Financial rewards will be given to schools that exceed targets and various sanctions are imposed on schools that decline in performance. Kentucky is unique in the nation for having, simultaneously: a) performance assessment as the backbone of student assessment, b) a "high stakes" accountability system with very clear and tangible consequences for various outcomes, and c) the school as the unit of educational change.

KERA Evaluation Governing Board

At the end of November 1992, the Governor of Kentucky announced the appointment of the KERA Evaluation Governing Board. This group of 10 private citizens is charged with forming a non-profit corporation that will raise funds from private and public sources to support "an in-depth evaluation of the impact of KERA . . . [which] should include but not be limited to the effect of

the reforms on students, individual schools, school systems and educators" (Jones, 1992, p. 1).

In the proposed operational plan for the evaluation, three basic questions are given as guiding purposes for this accountability effort.

1. What are the intended and unintended effects of KERA on students?

2. How were KERA and its components implemented, what factors affected implementation, and did implementation affect the educational system and student outcomes?

3. How can the various benefits of KERA be enhanced and the implementation of its components be improved?

The Evaluation Governing Board has $400,000 funding for its first year of operation (donated by a philanthropic foundation). The Board must hire an executive director and then begin developing a research agenda to carry out its charge.

Accountability for School Reform at the State Level

Kentucky is certainly not unique in its efforts at statewide school reform. Recent years have seen a number of states trying to improve education by instituting curricular and organizational innovations. Programs and policies have included site-based management, statewide curriculum frameworks, integrated children's services, teacher career ladder programs, and schemes to financially reward schools that improve on outcome measures (Odden, 1992). (Side note. Kentucky has tried, or is now trying, all of the items in this list.)

Educational reform efforts are largely funded by state tax revenues. Like other government programs, they require monitoring, oversight, and assessment. This is especially true when reform programs have been enacted by virtue of increased taxes. Quite naturally, members of the public want to know if their money is being spent wisely. Given this interest, what sorts of accountability mechanisms have been developed to assess school reform measures?

In an interview study involving states in all regions of the U.S., Wohlstetter (1991) set out to describe exemplary accountability procedures, i.e., to describe "best current practices." Wohlstetter's article provided a classification, a critique, and the basis for a theory regarding state accountability mechanisms for school reform. She identified four kinds of mechanisms that have emerged: a) Legislative oversight committee model, b) Executive branch model, c) Partnership model, and d) Third-party model. Brief descriptions of these are given below.

Legislative oversight model

Examples of the legislative oversight model are the Education-finance committee in Tennessee, the Legislative leader committee in Texas, and the

Legislative-audit committee of Virginia. Such committees consist of state legislators and have oversight as their sole purpose. They generally benefit from this concentrated focus, because they avoid the distractions of writing new legislation.

Executive branch model

With this model, oversight is tied more closely to the governor of the state. For example, the Connecticut State Board of Education has statutory responsibility for setting policy and monitoring the condition of education. Members of the nine-member board are laypersons appointed by the governor, but attempt to remain independent of both the governor and legislature.

Partnership model

In this context, partnership means a cooperative relationship between two or more separate organizational entities. One example is a school-business partnership in South Carolina. The "working arm" of the partnership is a 20 member Business-Education committee consisting of 10 business and civic leaders, 6 educators, and 4 legislators. The group participates in evaluating a state education reform law.

In the state of New York, partnership of different sort involves state government officials with those at the local level. The state Board of Regents, commissioner, and state department of education set broad policy guidelines and minimum achievement standards for local districts. The latter can operate their own accountability systems, as long as individual schools meet minimum state standards.

Third-party model

One example of this model of accountability is Policy Analysis for California Education (PACE). This is a university consortium that does policy-

relevant educational research. PACE involves professors from the University of California, Stanford University, The University of Southern California, and other institutions. It is funded by a private foundation and maintains independence from the governor, legislature, and state department of education.

Another example of a third-party would be a outside organization (e.g., a private firm) hired to do performance auditing. The latter is analogous to financial auditing and would involve determining the level of implementation of reforms and measuring the extent to which program results have been achieved.

Kentucky Accountability Mechanisms in Terms of the Wohlstetter Taxonomy

Several accountability components of KERA fit the Wohlstetter classification of accountability mechanisms. First of all, Kentucky's Office of Educational Accountability (OEA) is considered an arm of the state legislature, and thus falls in the category legislative oversight model. As was stated earlier, OEO is an independent arm of the legislature and is charged with monitoring the implementation of KERA, especially its governance provisions.

State department of education bureaus fit under the executive branch model because they ultimately report to the Commissioner of Education and the State Board of Education, who are all gubernatorial appointees. A particular set of priorities of a governor can be reflected in the governor's appointments and interaction with those in these offices.

School accountability, with its system of rewards and sanctions, also best fits under the category executive branch model. Day-to-day operation of the assessment is directed by the private firm of Advanced Systems in Measurement and Evaluation under a contract from the department of education. The latter carries out policies of the State Board of Education and the Commissioner of Education.

The most recent accountability initiative is the KERA Evaluation Governing Board, announced at the end of November 1992. This group of 10 citizens is charged with "the development and implementation of an evaluation of the Kentucky Educational Reform Act" (Jones, 1992, p. 2). This will be accomplished by establishing a non-profit organization, to be funded by foundations and sources other than state tax revenues. Clearly, the work Evaluation Board would be classified as a third-party model in the Wohlstetter taxonomy.

After Wohlstetter (1991) described the four accountability mechanisms identified in her survey of states, she then discussed the uses of the data generated by the models and the consequences. In explaining the word use in this context, Wohlstetter drew upon the work of Carol Weiss. In a study of the operation of U. S. congressional committees, Weiss (1989) identified four kinds of functions that the information collected by committees can serve.

> Support--certifies that the preexisting position is right;
>
> Warning--signals that a problem is (or is not) severe;
>
> Guidance--indicates better alternatives;
>
> Enlightenment--offers new constructs, new ways of thinking about issues.
>
> (Weiss cited in Wohlstetter, 1991, pp. 42-43)

These categories of use can be applied to accountability mechanisms for state education reform. Indeed, Wohlstetter did this with the four model mechanisms she identified. I do something similar below. I offer a few comments below about what appears to be the major functions played by the accountability mechanisms that I have identified in Kentucky. Judgments are summarized in Table 4.

Regarding Kentucky's Office of Educational Accountability (OEA), its most

obvious function seems to be warning of problems. Although this office is charged with several duties, the one that has been especially prominent has been investigating unresolved allegations of wrongdoing. Included in this list are several items related to governance, especially related to nepotism and financial favoritism (see Table 2). Guidance for policy decisions would also be part of its mission, but the overall charge of "monitoring the implementation of the Education Reform Act" is so large a task that, inevitably, other agencies have to be involved.

There are two accountability mechanisms under the executive branch: department of education bureaus and the school accountability system. These both seem to have a primary purpose of providing guidance for policy decisions, and secondarily to be functioning to warn of problems and to develop support for current policies.

Guidance for policy decisions might occur in several ways. On might be to present policy makers implementation data on the reform law and to influence policy changes on the basis of results obtained. For example, when the head of a bureau reports that schools implementing the ungraded primary program need more inservice for teachers, this would provide input on policies governing the kinds of professional development activities that should be planned.

Warning of problems can occur when implementation data reveal that plans are not being carried out. Additionally, shortfalls in system performance are also warnings. When the KERA-mandated performance assessment occurs in each school, some schools will fall below their target threshold of performance, or even have a lower percentage of successful students than during baseline assessment. Being declared a "school in crisis" is about as dramatic a warning as can be.

It might seem peculiar to list "support for current policies" as a function of accountability mechanisms, but this is entirely realistic. KERA, like any school reform, depends for its survival on legislators and citizens perceiving its benefits. Many aspects of the law can be successfully implemented and it is entirely understandable that a public agency would want to collect data about success and to publicize this.

The last accountability mechanism to be discussed is the KERA Evaluation Governing Board (and any organization that evolves from it). Here again, policy guidance seems to be a dominant function. This guidance could be very potent, because evaluation studies sponsored by a neutral, statewide board of citizens can have greater credibility than those sponsored by governmental agencies.

How the KERA board will operate is speculation at this point because it is just being organized. However, a secondary function of "support for current policies" may emerge as important. Wohlstetter (1991) described how PACE, the California third-party organization, sponsored a study documenting a reform law's benefits for secondary schools: "PACE's findings . . . invigorated public interest in education in California and also provided ammunition to reform advocates' policy debates at the state level" (p. 44).

Table 4

Organizations Involved with Kentucky School Reform Accountability

Classified Using Models Identified by Wohlstetter (1991)

Model and Kentucky Example	Dominant Function	Secondary Functions
Legislative oversight model		
Office of Educational Accountability (OEO)	Warning of problems	Guidance for policy decisions
Executive branch model		
Department of education bureaus	Guidance for policy decisions	Warning of problems Support for current policies
School accountability system	Guidance for policy decisions	Warning of problems Support for current policies
Third party model		
KERA Evaluation Governing Board	Guidance for policy decisions	Support for current policies Warning of problems

After examining various accountability mechanisms, Wohlstetter (1991) developed a set of criteria to judge their effectiveness. It is worth using these criteria to examine the strengths and weaknesses of the Kentucky mechanisms. In Wohlstetter's view, effective accountability mechanisms should:

1. Be empowered by state government,
2. Have monitoring or oversight as a primary mission,
3. Be independent from implementors,
4. Have strong relationships with other policy actors and with leaders outside government,
5. Communicate findings to multiple constituencies. (1991, pp. 45-46)

Based on Wohlstetter's analysis of how the mechanisms she studied operate, and my knowledge of the Kentucky system, I offer some judgments (summarized in Table 5) of how KERA mechanisms meet these criteria.

The Office of Educational Accountability (OEA) and department of education bureaus are alike in that both are clearly empowered by state government to engage in accountability activities, and both are at least "moderate" in the degree to which oversight is a primary mission. Regarding independence from implementors, OEA has the advantage here because the office is really a branch of a legislative service agency. The department of education does monitoring, but it also creates the very programs and regulations that it is monitoring. Both mechanisms would be moderate in terms of relationships to top policy-makers (being more directed to other practitioners than anyone else) and restricted to communicating with teachers, principals, and other educators than other audiences.

I view the school accountability system to be moderate to low on most criteria. There is no doubt that the system is highly important to KERA, and

has been fully empowered by state government. However, the system, as it currently stands, has the most relevance for teachers and principals in the schools throughout the state. Its many technical components are hard to communicate to policy-makers or other audiences.

Finally, the KERA Evaluation Board has much promise as an accountability mechanism. Unlike PACE in California, the KERA Board is fully empowered by state government (a gubernatorial order) and has oversight and evaluation as its sole mission. It is independent from implementors of KERA, and should have the ear of major policy makers. It is likely to view its mission as communicating with the many public school constituencies throughout the state.

Table 5

Organizations Involved with Kentucky School Reform Accountability Rated on Criteria Identified by Wohlstetter (1991)

Model and Kentucky Example	Criteria: Be empowered by state government	Have oversight as a primary mission	Be independent from implementors	Have strong relationships [a]	Communicate to multiple groups
Legislative oversight model					
Office of Educational Accountability (OEO)	High	High	Moderate	Moderate	Low
Executive branch model					
Department of education bureaus	High	Moderate	Low	Moderate	Low
School accountability system	Moderate	Moderate	Moderate	Low	Moderate
Third party model					
KERA Evaluation Governing Board [b]	High	High	High	High	High

[a] Relationships with other policy actors and with leaders outside government.

[b] Some judgments in this row are speculative, and based on experience of other states (e.g. California).

Future Directions for Accountability of KERA

Kentucky's school reform law is about three years old. As has been discussed, there are several accountability mechanisms for the reform law that are operating, or planning to operate. The mechanisms have more than one function, and also have strengths and weaknesses. Do all of these things exhaust the possibilities of accountability? Not at all. In this paper, I purposely selected large-scale organizational efforts. A number of additional studies on KERA are worth mentioning.

Independent investigators, with no reporting responsibility to any state agency, have studied or are now studying, effects of the reform law. To cite one example, Coe, Kannapel, and Lutz (1991) reported on the initial phase of a qualitative study of the implementation of KERA in several rural school districts. The study is planned to continue until 1995. In addition, investigators at the state universities have been involved in several empirical studies. For example, under contract to the state department of education, researchers from the University of Kentucky analyzed KERA preschool and its collaborative relationship with already-existing Head Start programs. Also, researchers from the University of Louisville have surveyed elementary teachers on their reactions to ungraded primary school and surveyed special education teachers about the effects of school reform on special students.

Is Kentucky doing enough in accountability? Could more be done? If these questions relate simply to the kinds of things that could be done, there is evidence that provisions of KERA are being evaluated with many of the techniques that experts have identified as useful.

In a monograph sponsored by the U. S. Department of Education, Kirst (1990) summarized "promising developments in accountability" throughout the

country. He listed six developments, and it is interesting to note that five of these are being implemented in Kentucky. Below are Kirst's accountability developments and one example that corresponds to each of them from the assessment of KERA.

Kirst's accountability development	Kentucky example
1. Performance reporting Statewide measures of student outcomes	School accountability system and threshold values for each each school
2. Monitoring and compliance with standards or regulations Determining whether deserving children get services	Office of Education Accountability (OEA)
3. Incentive systems Rewards for educators for specific results	School accountability system and potential financial rewards for school personnel
4. Reliance on the market Voucher plans, magnet schools	NO STATEWIDE IMPLEMENTATION OF THIS
5. Changing the locus of authority or control of the school Parent advisory councils, community-controlled schools	School-based decision-making involves a council with parents, teachers, and the principal
6. Changing professional roles Boards for professional teaching standards	Kentucky Education Professional Standards Board will establish requirements for obtaining and maintaining a teaching certificate

The only accountability development listed by Kirst not being used in Kentucky is "Reliance on the market." However, although this is not being used statewide, it is having an impact in some districts within the state. For example, magnet schools are being extensively used in Jefferson County Public Schools, the largest district in the state (93,000 students), and the district that includes Louisville and surrounding suburbs.

Taken as a whole, the array of assessment activities in the state is impressive. It might be tempting for Kentucky educators to view assessment related to KERA as totally sufficient. But no system of assessment and accountability is perfect. Kentucky would benefit by widening the scope of current assessment efforts and by improving the data linkages that exist among the efforts that are now going on. In summary, several aspects of the assessment of KERA could be improved. Below are examples.

1. An attempt should be made to provide performance data that are policy relevant. Kirst (1990) stated that accountability systems should highlight things that policy makers can change--teacher preparation, textbooks, number of science courses required. Assessment of KERA does not appear to be structured to do this. The school accountability system of KERA is elaborate and seems to have the potential for improving instruction at the individual school level. However, school accountability results and other variables, input variables like teacher preparation and process variables like course requirements, are not integrated into a single research database. It would be beneficial to tie input variables, process variables, and outputs together. In two years, some Kentucky educators will reap financial rewards because their schools exceed their "threshold" accountability index, and some schools will be declared "in crisis" because of poor performance. It would be useful to know what

BEST COPY AVAILABLE

systematic differences exist between such schools on potentially alterable variables. The kind of research needed in this area appears to be within the charge made to the KERA Evaluation Governing Board. The latter organization could provide an important service by sponsoring studies linking input, process, and outcomes.

2. Systematic research needs to be done on potential biases that could occur with the school accountability system, specifically the practice of using accountability index values and threshold values. As Kirst (1990) noted, "Not all schools start out at the same level in such areas as resources, pupil attainment, or teacher experience" (p. 16). According to KERA, each school will be compared against itself. This would seem to be eminently fair. However, the achievement of each school two years hence will be compared against a threshold value set last year. In rural communities, with little student mobility, the student body will be relatively stable year-by-year. As a result, comparing an accountability index from one time period to another will involve a similar student population. However, in urban areas, student mobility tends to be high. An accountability index for a school might depend on a large proportion of new students who transferred into the school since its threshold value was set. Rewarding or sanctioning teachers at a particular school does not make much sense if it is based on measuring the achievement of students who got most of their education at another school.

3. In the long run, school reform in the state will have the best chance to succeed if Kentucky students are seen as comparing favorably with students in the rest of the country. At present, the question of how to compare students, or even whether to compare students, is unresolved. There are many innovative features in the student assessment being used for KERA. However,

the system is unique to the state. Some parents are already requesting comparative data regarding their child and children in other parts of the U.S. Moreover, the Kentucky Supreme Court decision that led to the passage of KERA specified that children in the state should receive an education that allows them to compare favorably with students in other states. The accountability system would be strengthened by allowing these kinds of comparisons.

4. A number of issues related to the system of incentives and sanctions are worthy of investigation. For example, the weight of the school accountability system falls on teachers and school principals. These school personnel get financial rewards for improvements in school performance or get sanctions for poor school performance. Perhaps this is appropriate. However, this emphasis raises questions about the role and responsibility of students and parents. It also raises issues about the functioning of the performance assessment system. How much test-taking motivation will there be if there are no immediate consequences, positive or negative, for students who are assessed with ccountability measures? Kentucky is often cited for having a "high-stakes" testing system, but most of the stakes are for school professionals, not students or parents.

5. Some documentation needs to occur of what is actually going on in classrooms as a result of school reform. Performance assessment was emphasized in Kentucky because it was hoped that teachers would put more stress on problem-solving and other forms of student activity that require higher-level thinking. It is not unreasonable to suppose that teachers will indeed change their instructional practices to reflect the fact that portfolios and other kinds of complex student output will be used for school accountability. However, just what are teachers doing? And what will they be doing in the

future, as the reform proceeds? Related to this is the question are several others. Performance assessment is still a testing technology with questions about its reliability (Worthen, 1993). There is little, if any, backlog of experience about what problems might arise when financial rewards or sanctions are tied to performance assessment. Research also needs to be done on how the curriculum, and recently adopted statewide curricular goals, impact upon classroom instruction and the performance of students on accountability assessments.

6. A more experimentalist mind-set regarding school reform needs to be fostered within the state. This already exits in the area of performance assessment. It was frankly acknowledged from the beginning that statewide student assessment would evolve over time and might be changed as circumstances dictate. For example, it was originally believed that multiple-choice testing would be used for the indefinite future as a sort of backstop to performance assessment. However, data analysis of the 1991-1992 school year led the contracted testing company to conclude that multiple-choice items could be quickly phased out and replaced by more "authentic" testing formats (Advanced Systems in Measurement and Evaluation, Inc., 1993a).

It is inevitable that changes will be needed in other aspects of KERA. However, the open-minded spirit evident with performance assessment does not seem as evident with other parts of the reform law. Within the current media and education establishment in Kentucky, criticism of any part of KERA seems to be equated with being anti education-in-general. One factor that may explain this reluctance to re-think parts of the law is a fear that the whole thing will unravel if changes are allowed in any part of it. This thinking could be a carry-over from the days when there were legislative struggles to pass the

law in the first place. When KERA was debated by the state legislature in 1990, the law was presented for consideration as a complete package. A straight up or down vote determined the fate of the law. This probably made good legislative sense. However, once the law has been allowed to function, it is not very realistic to view it as a sacrosanct unitary package that cannot be altered in any way. This is especially true given the fact that KERA is such a large collection of different (and somewhat independent) programs and policies.

Another factor that may inhibit thoughtful debate about KERA is that the law contains just about every "educationally correct" idea that was in the air in the late 1980's. Perhaps people do not want to believe that any of these good ideas could possibly fail. There are fallacies here of course. Even great ideas sometimes fail (or fall short of expectations) when someone tries to implement them outside the context in which they were developed. Futhermore, a complex law like KERA is a unique combination of separate reform ideas, some of which have never been tried together at once. Some parts of the reform law may clash with or be incompatible with other parts of the law.

Certain fundamental organizational and sociological tensions have not been eliminated by the reform law, they are simply operating within a new framework. The issue of locus of control of education is one example. There is always some tension in education between central authority and the autonomous decisions of the individual teacher in his or her classroom. This tension is still very much present in Kentucky. What has been added to the scenario are some new organizations, e.g., school councils consisting of teachers, parents, and the principal, that are now involved in educational decision-making. School councils have to co-exist with school boards, the state department of education, teacher organizations, and a variety of other groups and

organizations that impact upon the teacher and the world of the classroom.

Despite some of the challenges outlined above, KERA remains a model of broad-scope state education reform. KERA and its related accountability activities can provide educators with a rich source of data on school change. By coordination of already planned assessment activities, the addition of new activities, and adopting a pragmatically experimentalist spirit, much can be learned about fundamental change of elementary and secondary education across an entire state.

References

Advanced Systems in Measurement and Evaluation, Inc. (1993a). Kentucky Instructional Results Information System, 1991-92 Technical Report. Report prepared for the Kentucky Department of Education. Dover, NH: Author.

Advanced Systems in Measurement and Evaluation, Inc. (1993b). Kentucky Instructional Results Information System, 1991-92 Technical Report, Appendices. Report prepared for the Kentucky Department of Education. Dover, NH: Author.

Coe, P., Kannapel, P., & Lutz, P. (1991). Initial reactions to the Kentucky Education Reform Act in six rural school districts. Charleston, WV: Appalachia Educational Laboratory.

Council on School Performance Standards. (September, 1989). Preparing Kentucky youth for the next century: What students should know and be able to do and how learning should be assessed (Vol. I, Executive Summary, Recommendations, and Technical Report). Frankfort, KY: Author.

Jones, B. C. (1992, November). Executive order 92 - 125 B, Establishment of the KERA evaluation governing board. Frankfort, KY: Office of the Secretary of State.

Kentucky Department of Education (1992). Annual report on strategic action plan objectives, 1991-1992. Submitted to the State Board of Elementary and Secondary Education. Frankfort, KY: Author.

Kirst, M. W. (1990). Accountability: Implications for state and local policymakers. Policy Perspectives Series. U. S. Department of Education, Office of Educational Research and Improvement. Washington, DC: U. S. Government Printing Office.

Miller, M. H., Noland, K, & Schaaf, J. (1991, September). A guide to the Kentucky Education Reform Act of 1990. Frankfort, KY: Legislative Research Commission.

Odden, A. R. (1992). School finance and education reform: An overview. In A. R. Odden (Ed.), Rethinking school finance: An agenda for the 1990s (pp. 1-40). San Francisco: Jossey-Bass.

Petrosko, J. M. (1990, October). The role of evaluation in statewide educational reform: Kentucky as a case study. Paper presented at the meeting of the American Evaluation Association, Washington, D.C.

Petrosko, J. M. (1991, October/November). Evaluation and system-wide educational change: Kentucky school reform in its second year. Paper presented at the meeting of the American Evaluation Association, Chicago.

Rose v. Council for Better Education, Inc., S.W.2nd. 790 (1990).

Weiss, C. H. (1989). Congressional committees as users of analysis. Journal of Policy Analysis and Management, 8, 411-431.

Wohlstetter, P. L. (1991). Accountability mechanisms for state education reform: Some organizational alternatives. Educational Evaluation and Policy Analysis, 13, 31-48.

Worthen, B. R. (1993, February). Critical issues that will determine the future of alternative assessment. Phi Delta Kappan, 74(6), 444-454.